CLAIMS

1. An LED illumination device comprising LED lamp modules coupled in a vertical direction, each LED lamp module comprising:

a base;

a conductive circuit formed on the base; and

a cover to be attached to the base to cover the conductive circuit,

whereby a coupling portion is formed on said base to be coupled with the cover of the LED lamp module located at the upper side thereof, and a mating coupling portion is formed on said cover to be coupled with the coupling portion of the base of the LED lamp module located at the lower side thereof.

2. The LED illumination device as described in claim 1,

wherein said coupling portion is a locking frame projecting upward, and said mating coupling portion is a locking arm having a hook at its distal end and projecting downward to be engaged with said locking frame,

wherein one guide, into which said locking arm is inserted, is formed on said base near the locking frame, and the other guide, into which said locking frame is inserted, is formed on the cover near the locking arm.

3. The LED illumination device as described in claim 2,

wherein said locking frame is curved inward.

4. The LED illumination device as described in claim 3,

wherein a guide rib is formed on a ceiling wall of the cover

to straighten the curved locking frame when coupling the cover and the base to each other.

5. The LED illumination device as described in any one of claims 1 to 4,

wherein a locking part for locking the coupled cover is formed on the base, and a mating locking part is formed on the cover to be engaged with said locking part.

6. An LED lamp module comprising:

an insulating case having a base and a cover;

a conductive circuit provided at said base;

an LED mounted on the base and electrically connected to the conductive circuit;

electric wire joints provided respectively upstream and downstream of the conductive circuit.

7. The LED lamp module as described in claim 6,

wherein said conductive circuit is a bus bar or a lead terminal.

8. The LED lamp module as described in claims 6 or 7,

wherein said electric wire joint is a pressure contact terminal.

9. A lamp module assembly comprising a plurality of said LED lamp modules as described in any one of claims 6 to 8,

wherein electric wires are directly connected to respective electric wire joints of the LED lamp modules without any branch wires.

10. The lamp module assembly as described in claim 9,

wherein said electric wires are wired to a junction box or a junction connector,

wherein an electric component for reducing voltage applied to said LED lamp modules is provided on the junction box or the junction connector.

11. The lamp module assembly as described in claim 9,

wherein said electric wires are wired to a junction box, a junction connector or other circuits through an electrical connector; and

an electric component for reducing voltage applied to said LED lamp modules is provided on said electrical connector.

12. A lamp module assembly comprising:

a plurality of LED lamp modules;

electric wires being connected directly to the LED lamp modules without any branch wires, and wired to a junction box or a junction connector; and

an electric component provided on said junction box or said junction connector for reducing voltage applied to said LED lamp modules.

13. A lamp module assembly comprising:

a plurality of LED lamp modules;

electric wires connected directly to the lamp module assembly without any branch wires;

an electrical connector, through which said electric wires

being wired to a junction box, a junction connector, or other circuits; and

an electric component provided on said electrical connector for reducing voltage applied to said LED lamp modules.

14. The lamp module assembly as described in claim 11 or claim 13,

wherein said electrical connector includes a base and a cover, said base having a bus bar, and said electric component for reducing applied voltage connected to said bus bar, said bus bar having connector terminals and being connected to electric wires.

15. The lamp module assembly as described in claim 14,

wherein one positive terminal of said connector terminals of the bus bar is connected to one terminal of said electric component for reducing applied voltage from a voltage source, the other positive terminal of said connector terminals is connected to an anode of a voltage source, and a negative terminal of said connector terminals is connected to a ground of the voltage source.